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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/083,205	02/26/2002	Lawrence Zupon	15-841	5684
7590 12/19/2003 WATTS, HOFFMANN, FISHER & HEINKE CO., L.P.A.			EXAMINER	
			RUDDOCK, ULA CORINNA	
P.O. Box 99839 Cleveland, OH 44199-0839		ART UNIT	PAPER NUMBER	
,,,,,,			1771	

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

1	Application No.		$\bigcirc$
·	Application No.	Applicant(s)	
Office Action Summary	10/083,205	ZUPON ET AL.	
omeo reason cammary	Examiner	Art Unit	7
The MAILING DATE of this communication app	Ula C Ruddock	1771	
Period for Reply	ears on the cover sheet with the (	correspondence add	aress
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be tir within the statutory minimum of thirty (30) day rill apply and will expire SIX (6) MONTHS from	nely filed  s will be considered timely. the mailing date of this col	mmunication.
1) Responsive to communication(s) filed on <u>11 S</u>	September 2003 .		
2a)☐ This action is <b>FINAL</b> . 2b)⊠ Thi	s action is non-final.		
3) Since this application is in condition for alloward closed in accordance with the practice under E Disposition of Claims	nce except for formal matters, pa Ex parte Quayle, 1935 C.D. 11, 4	rosecution as to the 153 O.G. 213.	e merits is
4)☐ Claim(s) <u>1-25</u> is/are pending in the application.			
4a) Of the above claim(s) <u>9-13</u> is/are withdrawn			
5) Claim(s) is/are allowed.			
6)  Claim(s) <u>1-8 and 14-25</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or	election requirement.		
Application Papers			
9) The specification is objected to by the Examiner.			
10)☐ The drawing(s) filed on is/are: a)☐ accept			
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	ee 37 CFR 1.85(a).	
11) The proposed drawing correction filed on		ved by the Examine	r.
If approved, corrected drawings are required in repl			
12) The oath or declaration is objected to by the Exa	miner.		
Priority under 35 U.S.C. §§ 119 and 120			
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	)-(d) or (f).	
a) All b) Some * c) None of:			•
1. Certified copies of the priority documents			
2. Certified copies of the priority documents			
<ol> <li>Copies of the certified copies of the priorit application from the International Bure</li> <li>See the attached detailed Office action for a list o</li> </ol>	eau (PCT Rule 17.2(a))		tage
14)⊠ Acknowledgment is made of a claim for domestic			application).
<ul> <li>a)  The translation of the foreign language prov</li> <li>15) Acknowledgment is made of a claim for domestic</li> </ul>	isional application has been rece	eived.	•
Attachment(s)	<b>~~</b>		
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) atent Application (PTO-	 152)

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### **DETAILED ACTION**

- 1. The Examiner has carefully considered Applicant's amendment and accompanying remarks filed September 11, 2003. The 112/2nd paragraph rejections have been overcome.
- 2. It should be noted that the Examiner mistakenly failed to include claim 7 in the rejection of Paragraph #11 of Paper #3. As a result, the present rejection will be a non-final rejection.
- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

## Information Disclosure Statement

4. The information disclosure statement filed May 10, 2002, has been considered. However, two of the cited documents, specifically, document #1, 5, and 7 have no date. Applicant is asked to supply an approximate date (the year will suffice) for these documents. Otherwise, they will not be considered. It should be noted that a specific year is required in order for these references to be considered.

## Claim Rejections - 35 USC § 103

5. Claims 1- 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaupre (US 4,310,587) in view of Ward et al. (US 4,736,552). Beaupre disclose a vapor barrier sheet that is useful for insulation (abstract). The insulation comprises a fiberglass batting and the vapor barrier sheet has a substrate sheet that is metallized with thin layers of aluminum (col 2, In 53-59). Adhesives are used to bond the batting to the barrier sheet; these adhesives include hot melt adhesives (col 2, In 64-68). Beaupre discloses the claimed invention except for the teaching of a vapor retarder material.

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Ward et al. (US 4,736,552) disclose a roof insulation system having a vapor barrier comprising an impervious polypropylene-scrim-kraft paper material (col 4, In 28-31). It would have been obvious to have used Ward's vapor barrier along with the insulation material and vapor barrier sheet of Beaupre, motivated by the desire to create an insulation material with a high level of tensile strength and resistance to tear.

With regard to claim 5, it should be noted that optimizing the thickness of layers is a result effective variable. For example, the thickness of a layer directly affects the strength and durability of the laminate. Therefore, it would have been obvious to have made the polypropylene in the insulation of Beaupre and Ward et al. have a thickness of 0.0015 inches, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have made the polypropylene 0.0015 inches thick, motivated by the desire to create a vapor barrier sheet with increased strength and resistance to tear.

6. Claims 7, 8, and 16-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaupre (US 4,310,587) in view of Ward et al. (US 4,736,552) and Denenberg (US 3,097,124). Beaupre disclose a vapor barrier sheet that is useful for insulation (abstract). The insulation comprises a fiberglass batting and the vapor barrier sheet has a substrate sheet that is metallized with thin layers of aluminum (col 2, ln 53-59). Adhesives are used to bond the batting to the barrier sheet; these adhesives include hot melt adhesives (col 2, ln 64-68). Beaupre discloses the claimed invention except for the teaching of a vapor retarder material.

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Ward et al. (US 4,736,552) disclose a roof insulation system having a vapor barrier comprising an impervious polypropylene-scrim-kraft paper material (col 4, ln 28-31). It would have been obvious to have used Ward's vapor barrier along with the insulation material and vapor barrier sheet of Beaupre, motivated by the desire to create an insulation material with a high level of tensile strength and resistance to tear.

Beaupre and Ward et al. disclose the claimed invention but fail to teach that the aluminum is perforated. Denenberg (US 3,097,124) disclose an insulating wallboard having an aluminum outer layer that has holes, i.e. perforated (col 2, ln 41-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used Deneberg's method of perforating on the aluminum in the insulation material of Beaupre and Ward et al. motivated by the desire to create an insulation material that prevents undue moisture condensation and permits sufficient, though small, air circulation.

Although Beaupre, Ward et al., and Denenberg do not teach the newly added limitation of a reflective layer reflecting approximately 97% of the radiated heat, it is reasonable to presume that this property is inherent to the insulation material of Beaupre, Ward et al., and Denenberg. Support for said presumption is found in the use of like materials (i.e. perforated aluminum). The burden is upon Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In addition, the presently claimed property of a reflective layer reflecting approximately 97% of the radiated heat would obviously have been present once the insulation of Beaupre, Ward et al., and Denenberg is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

### Response to Arguments

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7. Applicant's arguments filed September 11, 2003, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that neither the Ward et al. nor Beaupre references include a first and second deposit of hot melt glue in direct contact with the layer of fiberglass. This argument is not persuasive because the claims as written do not preclude the use of other layers in the laminate. Because the claims are written in open language (i.e. comprising) other layers can be present. Applicant also argues that the Ward et al. does not disclose the use of hot melt glue or a vapor retarder material. This argument is not persuasive because Ward does disclose a vapor retarder system (col 4, ln 28-31) comprising an impervious polypropylene-scrimkraft paper material. Furthermore, Ward et al. was not used for its teaching of hot melt glue, the Beaupre reference discloses the hot melt glue in the laminate (col 2, ln 66-68).

#### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C Ruddock whose telephone number is 703-305-0066. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

UCR

Ula C. Ruddock
Primary Examiner
Tech Center 1700